Models UKOPLX1004QDU e UKOPLX1004STU

1) Please refer 15.19 (a) (3). It is deemed that there is enough place for statements on the label. So please print the statements on the label.

2) Please check your schematics. From your operational descritption we can infer that there are two antennas, one is for receiveing 2.4 GHz signal and the other one is for transmitting 433 MHz. But in the schematics there is "433 MHz Rx". Could you please explain this?

Another A.M.E. product has got the same hardware of LX1004STU but different firmware and different name.
LX 1004 STU is able to receive only MW transmission powered by LX2101 transmitter.
LX 1004 STU is the older version of LX1004, now we are producing the LX 1004 QDU hardware only.

3) Please check the last second row on page 43 of your user manual. How much is the "transmission time"?
We show in the following table the total transmission times for each mode of operation

Mode		Total transmission time max (ms)
Standard	3Tx (150ms) + PSR (max 2s) + 2Tx(100ms)	2250
Fast	3Tx (150ms) + PSR (max 450ms)	600
APB	3Tx (150ms) + PSR (max 2s) + 2Tx(100ms)	2250
Track	3Tx (150ms)	600
ECM	3Tx (150ms) + PSR (max 2s) + 2Tx(100ms)	2250
Beeper	3Tx (150ms)	600

4) From the user manual we could not infer that 15.231 (a) (2) can be fulfiled. Please send us the corresponding plot to prove that transmission will be ceased in 5 seconds.

Please choose the worst case (also explain why it is the worst case) as the test report plot.
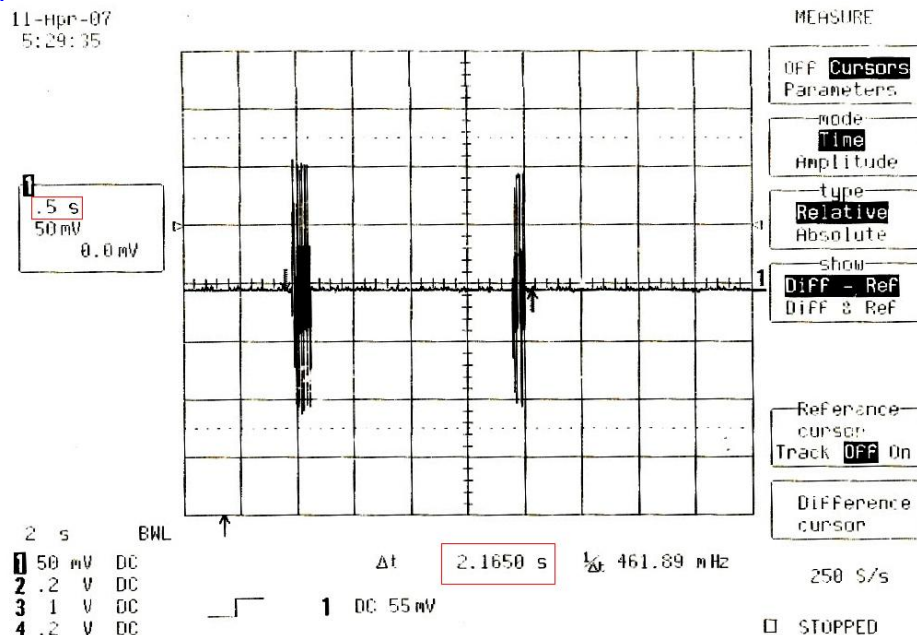
In figure you can see a plot of a transmission of APB mode, with pseudorandom time forced to max and so this is the worst case.
The total transmission time is about 2,2 sec maximum.

There are two important questions, which need to be answered.
Q1, The transponder is active and working under one code command. And in 5 seconds there is new code command. How will the transponder react?

The reaction of the transponder is strictly dependent of the LX2101FHU product code. In "standard mode" and "fast mode" of operation, if the microwave activation signal is received, the transponder transmit . We remind that "standard" and "fast" operation are admitted only in case of danger and in applications involving safety of life.
If we pose a transponder near an illuminator (worst case: continuous activation) we have the following reactions:
- APB no transmission (1 transmission when placing the transponder near the LX2101)
- ECM, TRACK no transmission (1 transmission when the transponder is carried out to the "illumination zone")

Using duty cycle operation of LX2101, (see user manual on section of TEMPORAL DIAGRAM of LX2101) the maximum time of no transmission by LX2101 is 900ms.
But minimum time between activation, to allow a new LX1004 transmission (APB, TRACK and ECM) is 1 sec.
So duty cycle operation of LX2101 is equivalent to a continuous activation.

Q2, It is possible that the transponder is in an overlapped area of two or more illuminators. If there are 2 command codes in 5 seconds from different illuminators, how will the transponder react?

The LX1004 2,45GHz receiver is a very simple amplitude demodulator and if different microwave activation signals hit LX1004 only the stronger one will be received. If the strength of two microwave signals is about the same, no code will be received.

Q3, In 5.8 of the user manual the BEEPER FAST mode is described as "at regular intervals". So It should fulfil 15.231 (a) (3), namely total transmission does not exceed 2
seconds in an hour.

Minimum interval between transmission in "beeper fast mode" is 15' and thus we have 4 transmissions in a hour for 1,8sec of total transmission time.

5) The application form 731 and the test report refer to a Receiver operating at 433,9 MHz.
Schematics and Part List show the use of a transceiver TR3000 which consists an intentional radiator and should not be certified as a receiver under equipment class CYY.
Please check and make sure that the application filing is consistent:
In case of receiver only (RX 5000/5500), the schematics and part list lists should not show a transceiver and should be corrected appropriately.

LX2002 is absolutely a receiver because the firmware on the LX 2002 always put the TR3000 in receiving mode.
The use of TR3000 is a question of "easy supplying" because other A.M.E. products are able to transmit at 433 MHz with TR3000, but the LX2002 can not do this.